

Work Order ID 143568

Wednesday, March 16, 2016 8:13:55 AM

143568

Page 1

Item ID: D4155-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Wearbar Assembly
 Start Date: 3/30/2016 Start Qty: 12.00 ***12*** Cust Item ID:
 Required Date: 4/6/2016 Req'd Qty: 12.00 ***12*** Customer:
 Reference:

Approvals: Process Plan: MCS Date: MAR 16 2016 Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4155	F								

100

100

Cold Saw

Hyd Mech

Memo

Cut D4155-1 at 94.00"

(EXTRA MATERIAL WILL BE CUT ON ASSEMBLY D4154-041)

0.00

0.00

12 EL / 16-6-8
PT

110

110

autoweld 1

Automated Welding 1

Weld per dwg & QSI004 4.5

Memo

1- USE GRINDER TO CHAMFER END AS PER DWG . SEE "DETAIL B"

SEE NOTE 9 FOR SURFACE BUILDUP

USE DT9756 WELDING FIXTURE

FOR AUTOMATED WELDING USE 8259 HARDCOAT

BATCH: M144444

0.00

0.00

12 PT / EL / 16-6-9

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval	
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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Work Order update only ☐

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Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150	QC21- Final Inspection - Work Order Release	0.00							
150									
QC	Memo	0.02							
Quality Control									

MC JUN 14 2016

MC JUN 14 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

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Misidentified ☐	Past Due ☐																																																														

Picklist Print

Wednesday, March 16, 2016 8:14:01 AM

Page 1

Work Order ID: 143568

143568

Parent Item: D4155-041

D4155-041

Parent Item Name: Wearbar Assembly

Start Date: 3/30/2016

Required Date: 4/6/2016

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP REV:A 15.10.16 AS PER DWG REV.F5 DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M304B0.250x0.500

Purchased

No

f

751.4103

98.52632

M304B0 250x0 500

EL 16-6-9

304 BAR .250 x .500

Location

Loc Qty

Loc Code

MAT

46.909

133276

10.979

m133175

7.93

m134172

28

MAT009

224.5013

m129366

18.967

m131748

20.949

m132332

48.5333

m133121

12

m133417

56.885

m133526

11.167

m133596

48

m134099

8

WA002

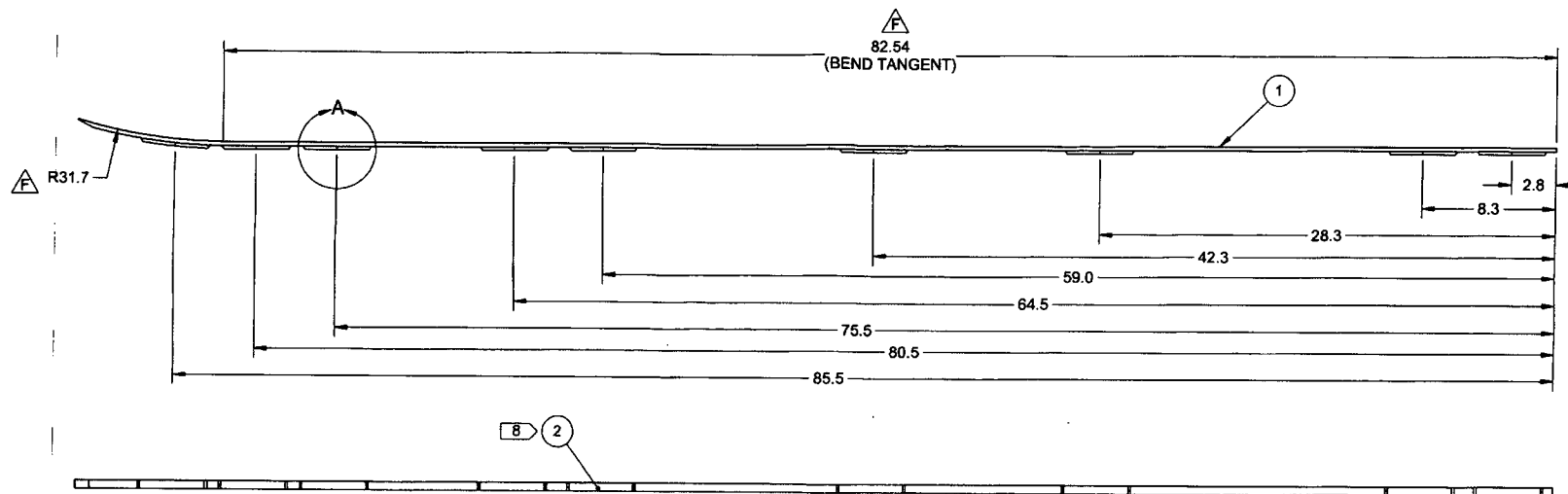
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m133923

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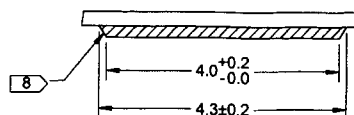
96'

ITEM	QTY	P/N	DESCRIPTION
	X	D4155-041	WEARBAR ASSEMBLY
1	1	D4155-1	BAR
2	A/R	8259 \ 2059B	HARD SURFACING



D4155-041 WEARBAR ASSEMBLY

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. ~~143568~~ 143568 16-03-15



DETAIL A
9 PL
SCALE 3X

- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: N/A
 - 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
 - 7) WEIGHT: 4.42 lbs
 - 8) BUILDUP HARD SURFACING 0.18 - 0.20 THICK USING 8259 ROD PER QSI 004 SECTION 4.5 (AUTOMATED WELDING) OR BUILDUP HARD SURFACING 0.19 - 0.25 THICK USING 2059B ROD PER QSI 004 SECTION 4.1 (MANUAL WELDING)

F	ADDED -041 ASSEMBLY. FWD END BEND DEFINED. NOTCHES REMOVED FROM -1 FOR NEW PROCESS	AJS	15.09.18
E	DIMENSION DATUM ON OPPOSITE END OF PART; 92.00 WAS 91.59. REF CIR12-10	SFM	13.02.20
D	REDESIGNED WITH SHORTER CUTOUTS. NOTE 8 ADDED. (PAR 12-213); 0.18 WAS 0.13	AJS	12.08.07
C	REMOVED TOOLING HOLE; ADD CUT OUT PROFILE (ZN C6-1 & C7-1); 2 DEC TOLERANCE (D1-1, D2-1)	RF	12.02.21
B	CHANGED MANUFACTURING PROCESS; MATERIAL WAS 0.50 THICK (A6-1); 0.25 REF WAS 0.20 (B6-1); 0.13 WAS 0.08 (B7-1)	MB	11.04.05
A	NEW ISSUE	SC	10.07.22
REV.	DESCRIPTION	BY	DATE
DESIGN	SC	DART AEROSPACE USA, INC. EUGENE, OR	
DRAWN	AJS		
CHECKED	AP	DRAWING NO.	REV. F
MFG. APPR.	JLM	D4155	SHEET 1 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	BAR	NTS
DATE	15.09.18	COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED
2015-12-07
ECN 15-051

APPROVED

8 7 6 5 4 3 2 1

D

D

C

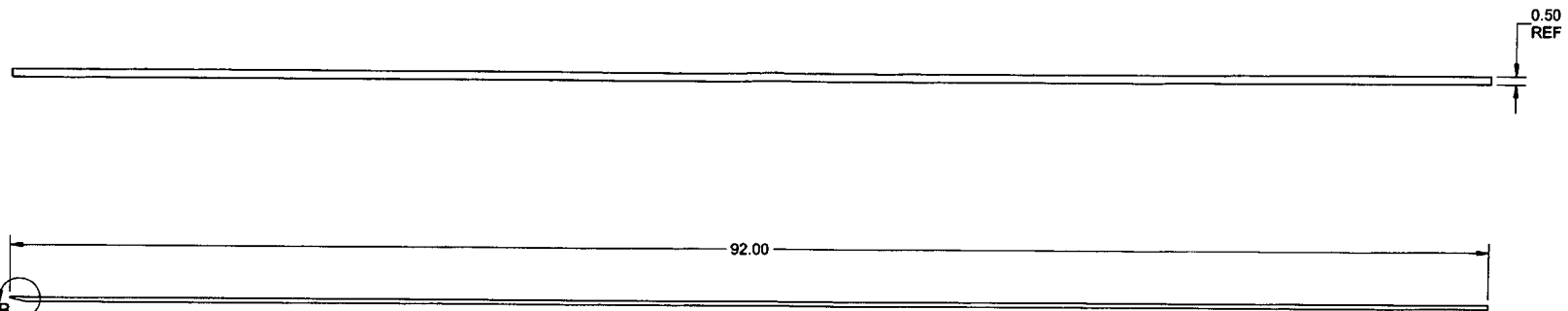
C

B

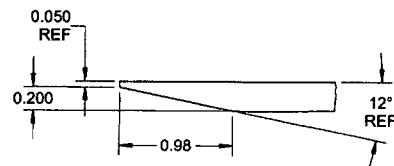
B

A

A



D4155-1 BAR



DETAIL B
SCALE 7X

NOTES:

- 1) MATERIAL : AISI 304/316 STAINLESS STEEL BAR, 0.25 THICK X 0.50 WIDE PER ASTM A276 OR ASTM A240
REF. DART SPEC. M304B0.250X0.500
- 2) FINISH : NONE
- 3) TOLERANCES : PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS : INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES : 0.005 TO 0.010 MAX
- 6) IDENTIFICATION : NONE
- 7) WEIGHT: 3.29 lbs

RELEASE
2015-12-07

APPROVED

DESIGN	SC	DART AEROSPACE USA, INC.	
DRAWN	AJS	EUGENE, OR	
CHECKED	AP	DRAWING NO.	REV. F
MFG. APPR.	JLM	D4155	SHEET 2 OF 2
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	BAR	NTS
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8 7 6 5 4 3 2 1